WAVEGUIDE-BASED OPTICAL INTERFEROMETER

ABSTRACT OF THE DISCLOSURE

Techniques for measuring spatial locations. An apparatus for measuring spatial locations includes a first object at a first location, a second object at a second location, and a waveguide-based interferometer coupled between the first object and the second object. The waveguide-based interferometer includes a waveguide material. The waveguide material is adapted to carry at least a reference beam and a measurement beam. The reference beam traverses a first path defined within the waveguide material. The measurement beam traverses a second path defined within the waveguide material and a third path defined outside of the waveguide material. The third path is related to at least one of the first location and the second location.